



On-board camera tutorial

In the process of using this camera, if you have any questions, please contact us in any of the following ways, our technical support will help you solve the problem as soon as possible.

Facebook: <https://www.facebook.com/yahboomcar/>

<https://www.facebook.com/yahboomtech>

WhatsApp: +86 15818515042

+86 18682378128

Skype: sales_79883

Dolphin2448534184@gmail.com

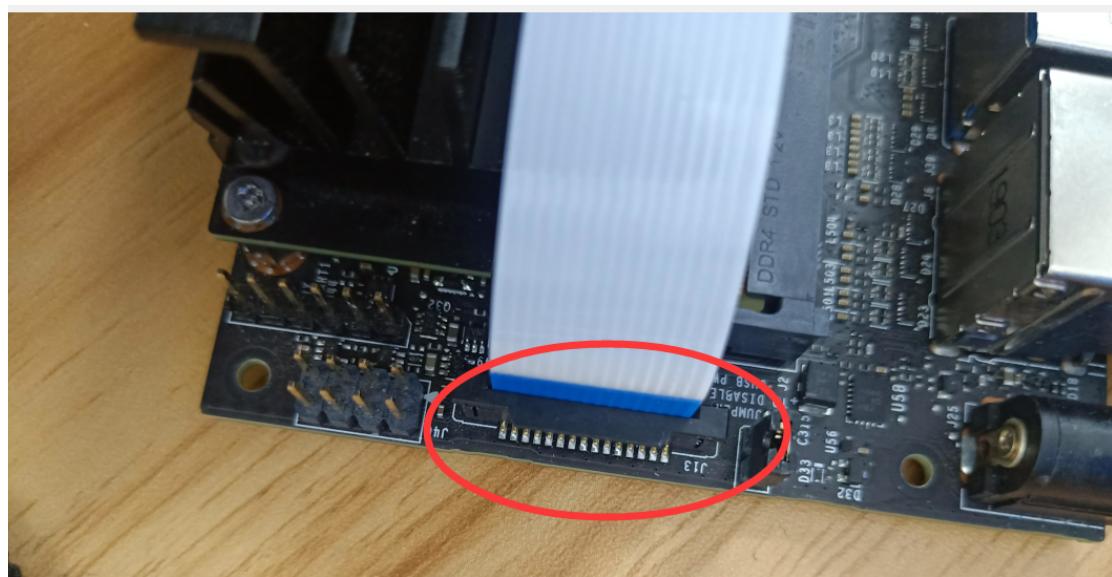
Technical support email: market@yahboom.com

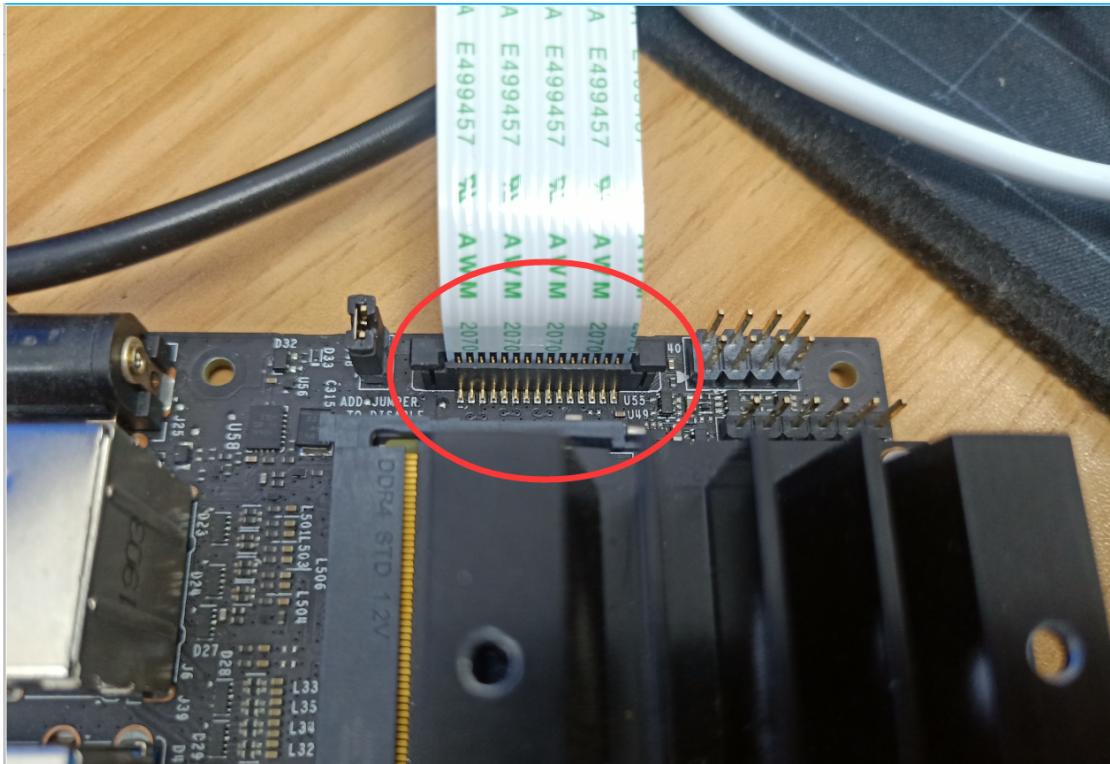
Amazon support email: amazon@yahboom.com

Note: This tutorial only supports **IMX219** sensor camera currently.

1. About wiring

Please complete the wiring between the camera module and the Jetson Nano board as shown below.



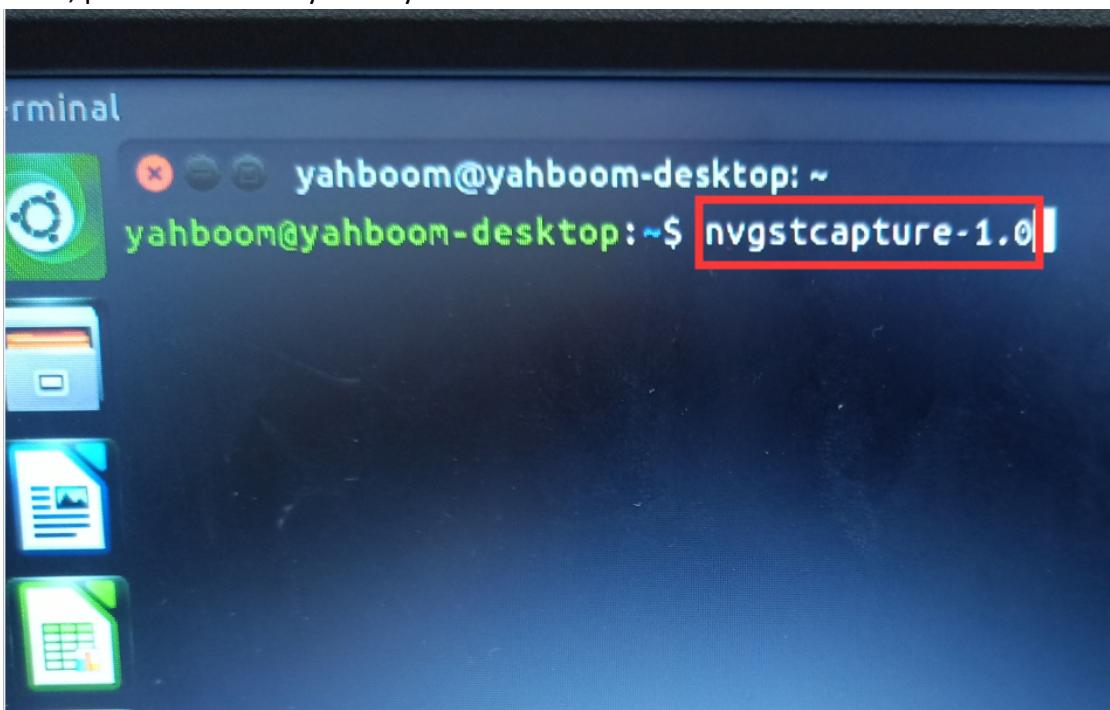


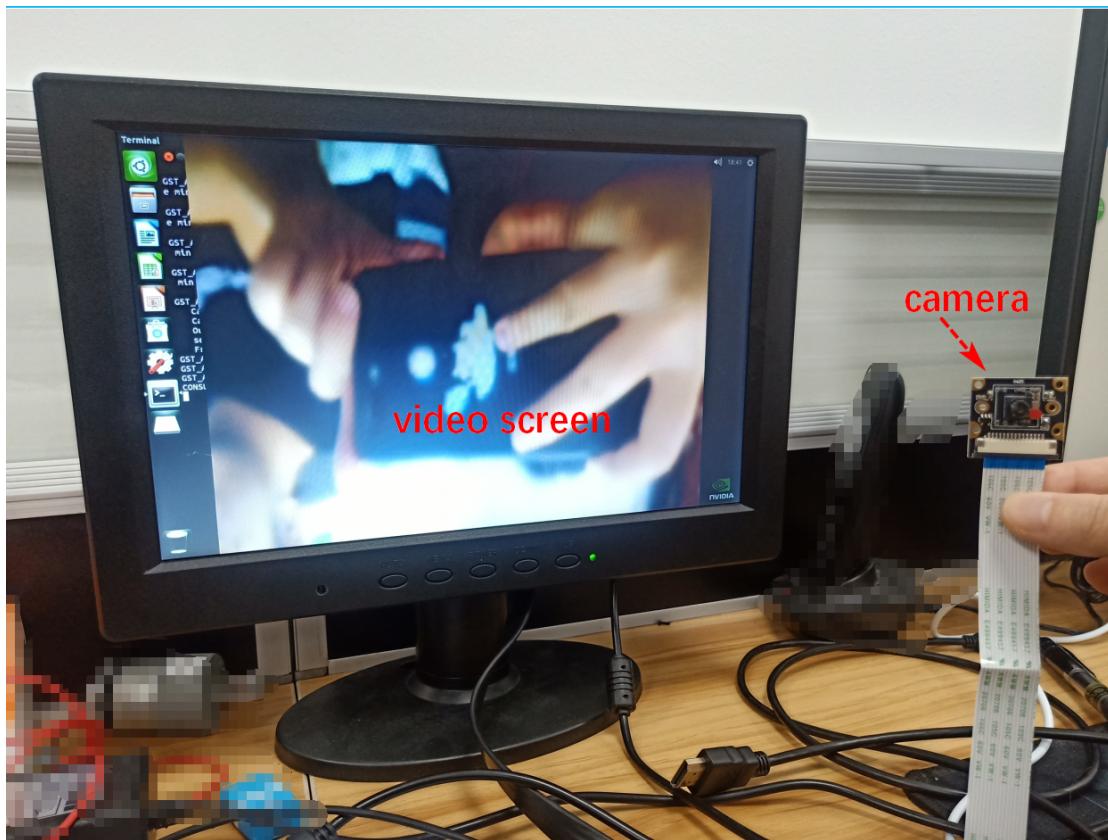
2. How to test the camera

2.1 We need to open the terminal of Jetson Nano and input command:

nvgstcapture-1.0

Then, press “Enter” on your keyboard. You can see video screen. As shown below.





2.2 We can use several commands in the manual.

1) **--prev_res**

This command is used to preview the resolution, height and width of the video, CSI camera with a range of 2 to 12 (5632x4224)

e.g: `nvgstcapture-1.0 --prev-res=3`

As shown below:

```
yahboom@yahboom-desktop:~$ nvgstcapture-1.0 --prev-res=3
Encoder null, cannot set bitrate!
Encoder Profile = High
Supported resolutions in case of ARGUS Camera
(2) : 640x480
(3) : 1280x720
(4) : 1920x1080
(5) : 2160x1560
(6) : 2592x1944
(7) : 2616x1472
(8) : 3840x2160
(9) : 3896x2192
(10): 4288x3120
(11): 5632x3168
(12): 5632x4224

Runtime ARGUS Camera Commands:
  Help : 'h'
  Quit : 'q'
  Set Capture Mode:
    mo:<val>
      (1): image
      (2): video
  Get Capture Mode:
    gmo
  Set sensor orientation:
    so:<val>
      (0): none
      (1): Rotate counter-clockwise 90 degrees
      (2): Rotate 180 degrees
      (3): Rotate clockwise 90 degrees
  Get sensor orientation:
    gso
```



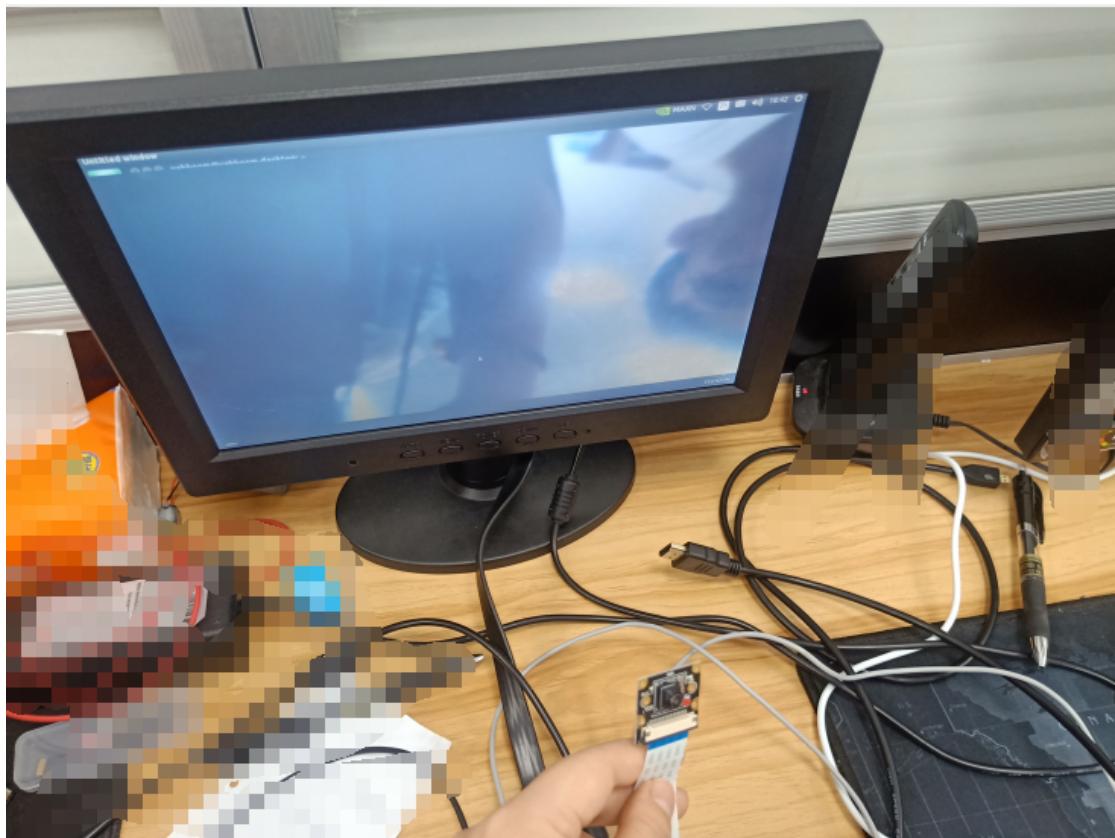
2) --cus-prev-res

This command is used to custom preview resolution, width and height, only support CSI camera

e.g: `nvgstcapture-1.0 --cus-prev-res=1920x1080`

As shown below:

```
yahboom@yahboom-desktop:~$ nvgstcapture-1.0 --cus-prev-res=1920x1080
GST_ARGUS: Starting repeat capture requests.
CONSUMER: Producer has connected; continuing.
** Message: 18:42:40.038: <_intr_handler:4197> User Interrupted..
Terminating the camera pipeline ...
GST_ARGUS: Cleaning up
CONSUMER: Done Success
GST_ARGUS: Done Success
** Message: 18:42:40.421: <main:4609> Capture completed
** Message: 18:42:40.421: <main:4658> Camera application will now exit
GST_ARGUS:
PowerServiceHwVic::cleanupResources
yahboom@yahboom-desktop:~$ Encoder null, cannot set bitrate!
Encoder Profile = High
Supported resolutions in case of ARGUS Camera
(2) : 640x480
(3) : 1280x720
(4) : 1920x1080
(5) : 2164x1560
(6) : 2592x1944
(7) : 2616x1472
(8) : 3840x2160
(9) : 3896x2192
(10): 4208x3120
(11): 5632x3168
(12): 5632x4224
Runtime ARGUS Camera Commands:
```



If multiple commands are used at the same time, we need to use **!** separated.

If you want to turn off the camera, we need to input **"q"** directly in the terminal and press **"Enter"**.

If you want to capture the picture, we need to input **" j"** in the terminal and press **"Enter"**. The picture will be saved in the current directory.